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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,981	03/14/2002	Florence L'Alloret	220760USOPCT	2976
22850	7590	05/18/2007		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER EGWIM, KELECHI CHIDI	
			ART UNIT 1713	PAPER NUMBER
			NOTIFICATION DATE 05/18/2007	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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## Office Action Summary

Application No.

10/069,981

Applicant(s)

L'ALLORET, FLORENCE

Examiner

Dr. Kelechi C. Egwim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 25-69 is/are pending in the application.
- 4a) Of the above claim(s) 27,31,34,35,37,38,46-48,50-53,56-60 and 62 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25,26,28-30,32,33,36,39-45,49,54,55,61 and 63-69 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 041006.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. The Examiner hereby reopens prosecution in response to the appeal brief filed 01/08/2007.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 25, 26, 28-30, 32, 33, 36, 39-45, 49, 54, 55, 61, 63, 64 and 65-69 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Even in the sections cited by applicant (page 9, lines 7-9 and page 29, line 11-12), support for the added language in independent claim 25, wherein the polymer is explicitly water-soluble in the specific range of 5 to 80°C at a concentration of at least 10 g/l, is not found in the originally filed description. Thus, this limitation represents new matter.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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5. Claim 49 is still rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear if applicant is claiming a block polymer or graft polymer. This claim seems to be requiring the two different structures at the same time.

***Claim Rejections - 35 USC § 102***

6. Claims 25, 26, 28, 30, 32, 33, 40-45, 49, 55 and 65-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Merchant Jr. et al., for reasons stated in previous Office Actions.

7. Claims 25, 26, 28, 29, 33, 40-45, 49, 55 and 65-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Koerner et al., for reasons stated in previous Office Actions.

8. Claims 25, 26, 28, 29, 32, 33, 39-45, 49, 55 and 63-67 are rejected under 35 U.S.C. 102(b) as being anticipated by Fogel et al., for reasons stated in previous Office Actions.

***Claim Rejections - 35 USC § 103***

9. Claims 25, 26, 28-30, 32, 33, 36, 39-45, 49, 54, 55, 61, 63, 64 and 65-69 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, 35

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U.S.C. 103(a) as being unpatentable over Maroy et al., for reasons stated in the previous Office Action.

### ***Double Patenting***

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 25, 26, 28-30, 32, 33, 36, 39-45, 49, 54, 55, 61, 63, 64 and 65-69 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of 44-46, 104, 110, 116, 119, 125, 126, 131, 134-136 and 143-144 copending Application No. 10/069,983, for reason stated in the previous action

### ***Response to Arguments***

11. Applicant's arguments filed 01/08/2007 have been fully considered but they are not persuasive.

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12. Regarding Merchant, Appellant continues to argue as if the maleic anhydride/alkyl phenol formaldehyde resin is the only copolymer of the LCST containing water-soluble polymer taught in Merchant. As stated above, Merchant also teaches including oxyalkylated amines, glycol resin esters, oxyalkylated polyols and oxyalkylated alkyl-phenol formaldehyde resins (the oxyalkylating groups are consistent with the defined LCST units and the amines, polyols and alkyl-phenol formaldehyde resins are consistent with the defined water-soluble units). (See pages 13-16 of the preset specification)

Further, the oxyalkylated alkyl-phenol formaldehyde resins (taught in col. 6) of Merchant are not limited to the p-nonyl phenyl formaldehyde resin of Example 1 referenced by applicant. It is well settled that anticipatory teachings are not limited to any particular embodiment/example. In re Boe, 148 USPQ 507 (CCPA 1966). Disclosed examples and preferred embodiments (even if the embodiments tested by appellant were preferred) do not constitute a teaching away from a broader disclosure. In re Susi, 440 F.2d 442, 169 USPQ 423 (CCPA 1971). Thus, the argument with regard to "the Malcolm Publication" is not persuasive, as they are lifted to only one of the many embodiment taught in Merchant et al. A variety of the claimed copolymers, with water-solubility within the claimed range, are still taught by Merchant et al.

Regarding the argument the "Merchant does not provide the requisite disclosure to select monomers of water-soluble and LCST units and arrange them in the manner that would be the same as the polymer defined in the claimed method", applicant claims 44, which applicant presents as being representative of the claimed invention, only requires the presences of the water-soluble and LCST units in the polymer and any



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(co)polymer, such as the oxyalkylated amines and oxyalkylated polyols, each specifically named in Merchant et al. (see col. 5, lines 50-66), wherein the oxyalkylating groups are consistent with the defined LCST units and the amine and polyol group are water-soluble units).

13. Regarding, Koerner, in col. 2, lines 13-18, col. 5, lines 27-34 and the examples, Koerner et al. teach the water-soluble emulsifier polymer with both water-soluble units and at least one such as water-soluble polyoxyethylene-polyoxypropylenemethyl polysiloxane, which has a cloud point at 29°C and thus is water soluble below 29 °C. (see col. 6, lines 24-28), fallen will within the range of water-solubility presently claimed. Again, applicant's claims do not require that the present polymers not have a cloud point, as suggested in the arguments. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

14. Again, regarding Foger et al., it is noted that the feature upon which applicant relies (i.e., wherein the polymer has polymer no cloud point) is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The polyoxyethylene portions in Foger et al are the water-soluble portion of the alkoxylate esters and (R<sub>2</sub>)<sub>x</sub> is the LCST portion of the alkoxylate ester. Even if the

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copolymers of Foger et al. had cloud points at 65°C as suggested by applicant, the would still be water-soluble below 65 °C, and thus within the claimed water-solubility range of 5 to 80°C.

### **Issue #9**

Regarding “the Maroy publications”, the Maroy publications teach the same specific polymers containing LCST units described in applicant’s specification is being consistent with the claimed polyoxyalkylene grafted polyacrylic acid polymers in the Maroy publications.

Even if the water-soluble/LCST copolymers described in “the Maroy publications” had cloud points at 100°C as suggested in applicant’s arguments, that would make them soluble at temperatures less than 100 °C, fully encompassing the claimed water-solubility range of 5 to 80°C. Appellant is reminded that the present claims are not to the LCST units themselves.

Finally, the polymers are not currently defined in the claims as “having a demixing temperatures of 5 to 40°C at 1% by mass in water”. This limitation is recited in the claims with regard to the LCST groups used in prepare the water-soluble polymers, no the polymer themselves.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kelechi C. Egwim whose telephone number is (571) 272-1099. The examiner can normally be reached on M-T (7:30-6:00).



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**KELECHI C. EGWIM PH.D.**  
**PRIMARY EXAMINER**

KCE

